

TX station: 4xAkl8  
Gain solid integration : enabled

Site Name: Labelitaly

General data of Antenna System

TX station	4xAkl8
Site Name	Labelitaly
System of coordinates	Geographic
Longitude	00°00'00.000"
Latitude	00°00'00.000"
Ground level a.s.l. (m)	100.0
Antenna system height (m)	50.0
Transmitter power(Watt)	1000.000
Carrier wave frequency (MHz)	98.000
Antenna system central frequency (MHz)	98.000
Antenna base diagrams type 1	LABEL ITALY-AKL_8 LOG 8 ELEM. FM WB
Antenna base diagrams type 2	-
Polarization (H/V/C/X)	V
Transmitting cable attenuation (dB)	0.0
Additional attenuations(dB)	0.0
Base diagrams sectors (T = All, F = Front)	T
Velocity factor of cables to Antennas (0÷1)	0.88
Coordinate System(C = cartesian, P = polar)	P
Mast side / diameter(cm):	10.0
Mast cross section (T/Q/C)	C
Structure rotation w.r.t. North (°)	0.0
Mast rotation w.r.t. North (°)	0.0

Information about antennas used in the System

	<i>Antenna type 1</i>
Manufacturer	LABEL ITALY
Antenna model	AKL_8 LOG 8 ELEM. F
Band start(MHz)	88
Band stop(MHz)	108
diagrams Frequency(MHz)	98
Polariz (H,V,C,X)	V
Vertical dist (cm)	260
Height (cm)	168
Width (cm)	6
Thickness (cm)	260
Weight (Kg)	14
Maximum power (KW)	2
Gain (dBd)	7.82
North E.C. (cm)	0
East E.C. (cm)	0
Return loss (dB)	20
R.C.Phase (°)	0

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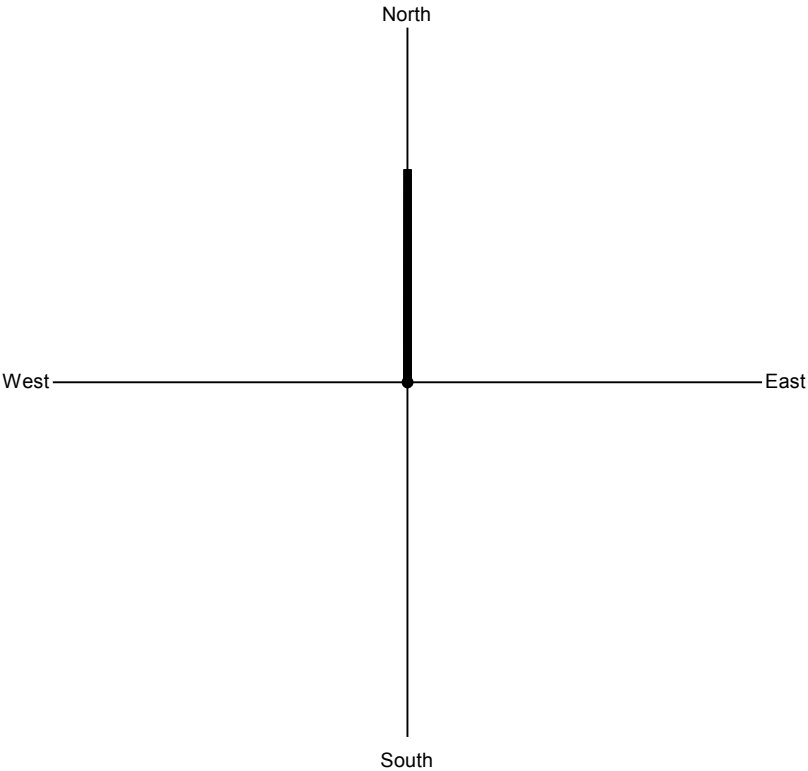
Geometr. and electrical data of Antenna System

	<i>Power</i> (%)	<i>Tilt</i> (°)	<i>Az.</i> (°/N)	<i>Phase</i> (°)	<i>V dist.</i> (m)	<i>Scr-d</i> (cm)	<i>Scr-Az</i> (°/N)	<i>Rot.</i> (1÷4)	<i>Type</i> (1÷2)	<i>L cables</i> (cm)	<i>Car. phase</i> (°)
1	25.000	0	0	0 +16.0	3.90	0.0	0.0	1	1	1538.0	16.0
2	25.000	0	0	0 +5.3	1.30	0.0	0.0	1	1	1546.0	5.3
3	25.000	0	0	0 -5.3	-1.30	0.0	0.0	1	1	1554.0	-5.3
4	25.000	0	0	0 -16.0	-3.90	0.0	0.0	1	1	1562.0	-16.0

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Plan of antenna system



Side of antenna system



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Antennas arrays data

A. Antennas array azimuth (°/N)	0
B. Number of antennas	4
C. Nominal power supply (W)	1000.00
D. Losses (addit. + cables) (dB)	0.0
E. Effective power supply (W)	1000.00
F. Theor. maximum gain (dBd)	12.87
G. Distribution losses (dB)	0.00
H. Nominal max gain [F - G] (dBd)	12.87
I. Compensation losses (dB)	0.04
J. Effec. max gain [H - I] (dBd)	12.83
K. Effec. max gain (times)	19.17
L. Effec. max power [E * K] (KW)	19.1727
M. Max power depr. angle (°)	1.8
N. Max power az. angle (°)	0

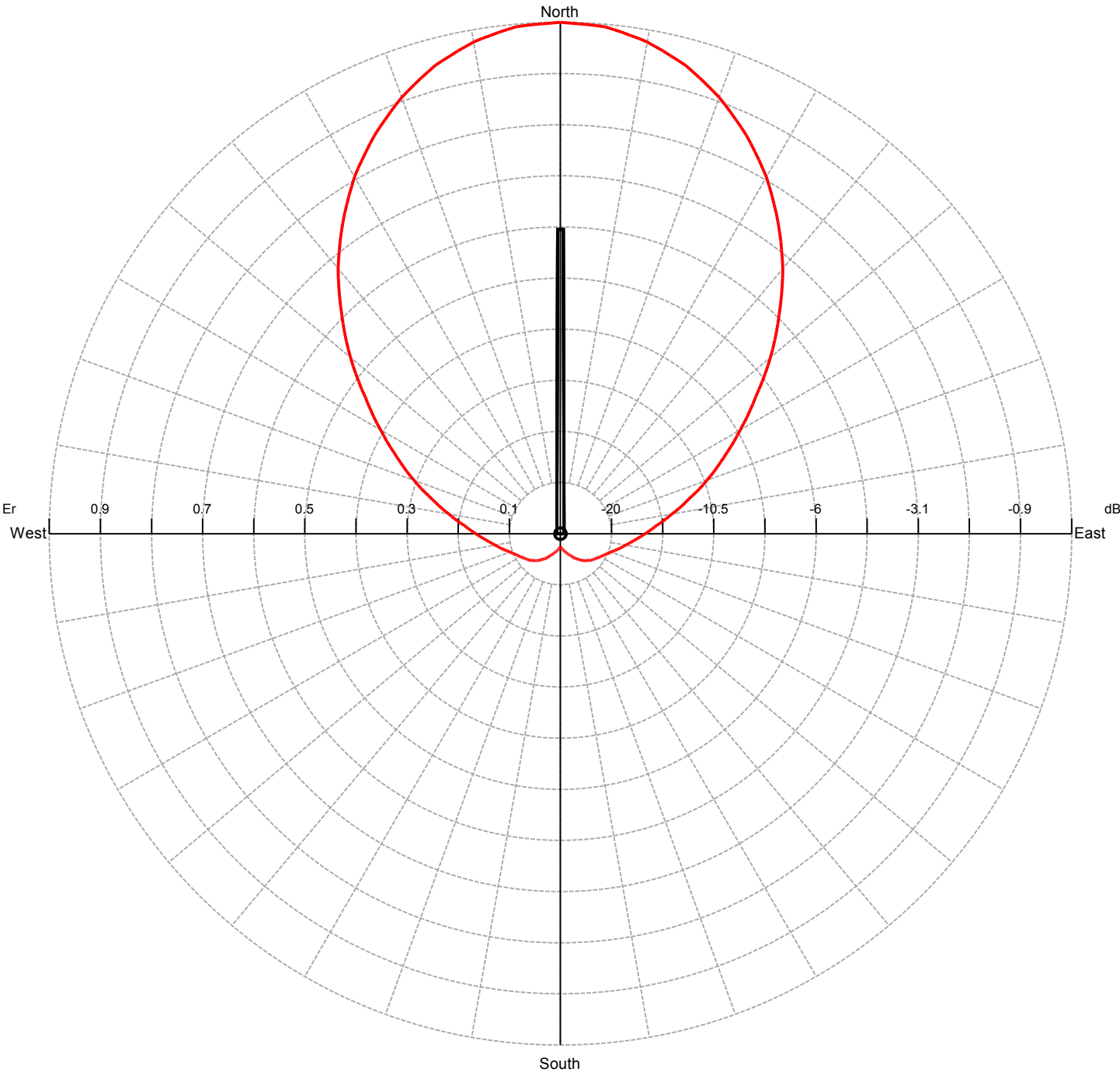
Diagram in dBK calculated at horizon

Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK	Az. (°/N)	dBK
0	12.7	90	-2.9	180	-7.2	270	-2.9
10	12.5	100	-5.1	190	-7.2	280	-0.4
20	11.8	110	-6.9	200	-7.2	290	2.4
30	10.8	120	-7.2	210	-7.2	300	4.8
40	9.3	130	-7.2	220	-7.2	310	7.3
50	7.3	140	-7.2	230	-7.2	320	9.3
60	4.8	150	-7.2	240	-7.2	330	10.8
70	2.4	160	-7.2	250	-6.9	340	11.8
80	-0.4	170	-7.2	260	-5.1	350	12.5

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Horizontal diagram at 0.0° depres. (Total Antenna)



0.0° depres. (Total Antenna), Gain (dBd): 12.68 ERP T.Max(KW): 18.5193 ERP E.Max(KW): 18.5193

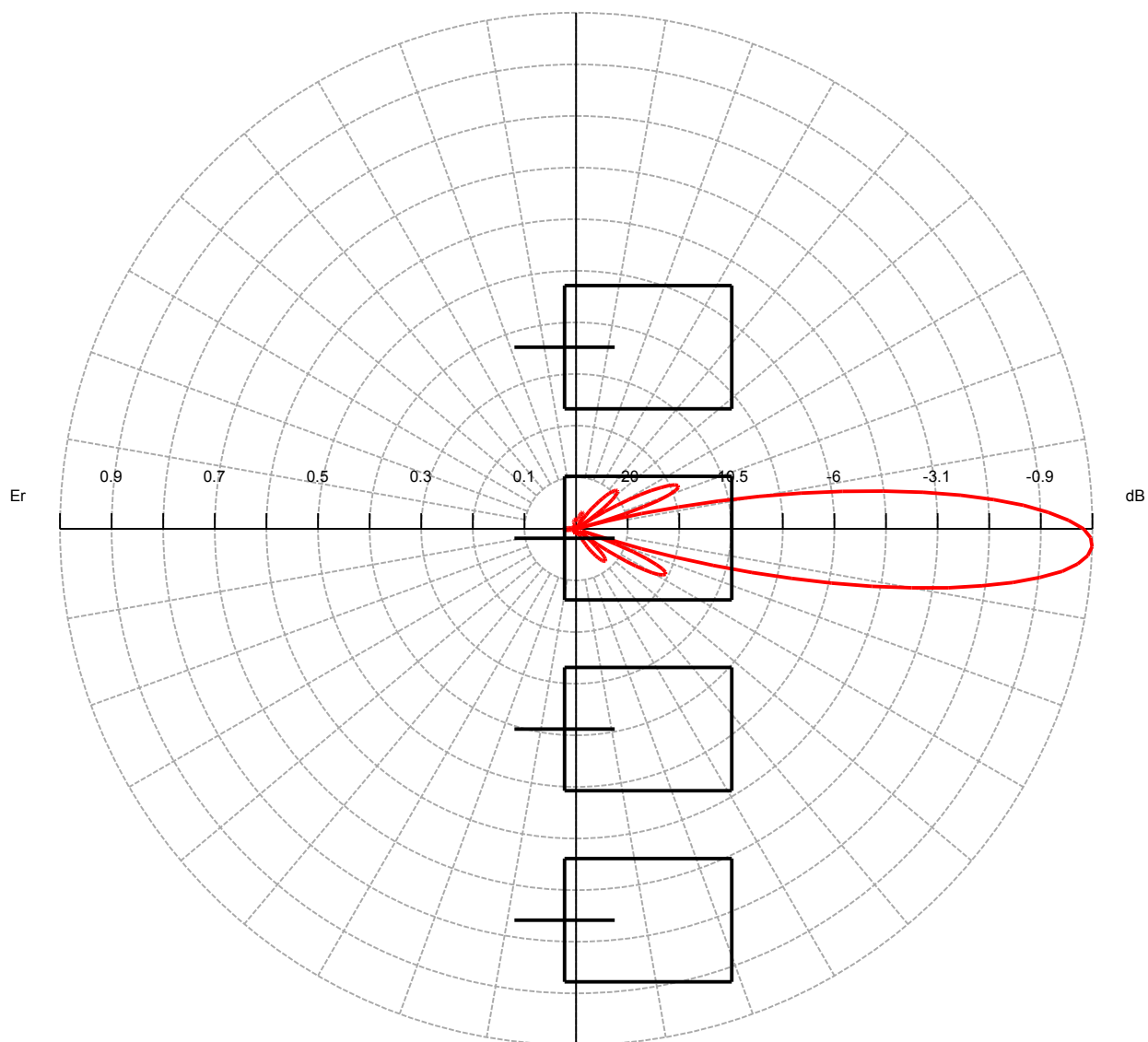
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## Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 12.82

ERP T.Max(KW): 19.1629 ERP E.Max(KW): 19.1629